10

- 37 -

## **CLAIMS**

- 1. A method of identifying the presence of CD94/NKG2+ NK cells and T cells in a sample, which method comprises contacting the sample with HLA-E under binding conditions and detecting binding of HLA-E to the cells.
  - 2. The method according to claim 1, wherein the HLA-E is labeled with a signal moiety and bound HLA-E is detected
  - S. A method of selecting CD94/NKG+ cells from a sample, which method comprises contacting the sample with HLA-E under binding conditions and separating cells bound to the HLA-E from the sample.
  - 4. The method according to claim 3, wherein the HLA-E is immobilised on a support.
- A method of killing or inactivating CD94/NKG2+ cells, which method comprises contacting the cells with HLA-E under binding conditions and carrying out targeted killing on the bound cells.
  - 6. The method according to claim 5, wherein the HLA-E is attached to an effector agent.
- 7. The method according to claim 6, wherein the effector agent is a toxic moiety which kills or inactivates the bound cells.
  - 8. The method according to any one of claims 5 to 7, wherein the CD94/NKG2+ cells are provided in a mixed cell population and the non-CD94/NKG2+ cells are recovered.
- 25 9. A method of modifying NK cell activity against a potential target cell, which method comprises expressing HLA-E at the target cell surface.
  - 10. The method according to claim a, wherein the HLA-E is expressed by a heterologous DNA stably integrated into the cell.

- 38 -

- 11. The method according to claim 10, wherein the cell does not normally express HLAE.
- 12. The method according to claim 11, wherein the cell is a non-human mammalian cell.
- 13. The method according to any one of claims 9 to 12, wherein the cell is present in a group of cells in a xenogeneic organ or tissue.
- 14. CD94/NKG2+ cells isolated by the method according to claim

15. A population of cells depleted of CD94/NKG2+ cells by the method according to claim 8.

16. A therapeutic method comprising introducing an effective quantity of cells according to claim 14 er elaim 15 into a patient.

A method comprising removing a sample of cells from a patient, isolating from the sample a population of CD94/NKG2+ cells or a population of CD94/NKG2 depleted cells, by the method according to claim 3 or claim 4 for claim 7, and reintroducing the isolated population of cells into the patient.

18. A non-human mammalian cell which expresses HLA-E at the cell surface by virtue of a nucleic acid encoding HLA-E integrated into the genome of the cell.

19. A non-human mammal comprising cells according to claim
18.
20 A method of testing a compound for biological activity, which method comprises:

- (i) providing cells expressing CD94/NKG2 receptors at the cell surface;
- (ii) contacting the cells with HLA-E in the presence of the test compound; and
- (iii) determining whether the presence of the compound affects the binding of HLA-E to the cells.

2° Kura Brass A

20

30

25

21. The method according to claim 20, wherein the CD94/NKG2 receptors are inhibitory/NK cell receptors such as CD94/NKG2A receptors.

- 39 -

22. The method according to claim 20, wherein the CD94/NKG2A receptors are stimulatory NK cell receptors such as CD94/NKG2C receptors.

23. Compounds identified by the method according to

claims 20 to 22, as affecting the binding of HLA-E to CD94/NKG2 receptors.

24. A multimer of HLA-E comprising two or more HLA-E

molecules, said multimer having enhanced binding capability compared to non-multimeric HLA-E, optionally labelled with a signal moiety.

25. The multimer according to claim 24, comprising recombinant HLA-E molecules attached via a linker molecule.

26. The multimer according to claim 25, wherein the HLA-E molecules are biotinylated and attached via a linker molecule such as streptavidin, avidin or extravidin.

27. HLAE coupled to a toxic agent.

28. The HLA-E according to claim 27, wherein the HLA-E is in the form of a multimer of HLA-E according to any one of claims 24 to 26.

20 29. HLA-E immobilised on a support.



15